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ABSTRACT

This monograph presents a discussion of the problems involved in implementing sex-fair coeducational classes in physical education. Suggestions, which grew out of a symposium on coeducational physical education, are offered on procedures that may be used for ability grouping, such as what type of test(s) are appropriate and when to use single or separate standards for grouping. Suggestions are also made on performance evaluation, such as when to use separate and single standards and how to assess students' approaches to physical education activities as well as the results of competition. Methods of fair grading are also discussed. Also included are abstracts of symposium papers on the topics of: (1) the use of health-related physical fitness tests to achieve sex-fair ability grouping (Sharon Plowman); (2) use of skill/activity tests to achieve sex-fair ability grouping in physical education (Marian E. Kneer); (3) use of motor ability tests to achieve sex-fair ability groups; (Margaret J. Safrit and Terence M. Wood); (4) practical management concerns regarding the use of health-related motor and skill tests to achieve sex-fair ability groupings (Janet Fuller); (5) conceptual approach to sex-fair performance evaluation (Barbara J. DeLong); (6) practical/management approach to sex-fair performance evaluation (Ann Stevens and Ken McGonagle); (7) sex-fair performance evaluation (Helga Deutsch); and (8) Deerfield High School's sex-fair performance evaluation (Bob Jones). (JD)

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Tips and Techniques: Ability Grouping and Performance Evaluation in Physical Education

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Title IV Sex Desegregation Project
Equal Educational Opportunity Section
Illinois State Board of Education
1982

SP 021 277

Edward Copeland, Chairman
Illinois State Board of Education

Donald G. Gill
State Superintendent of Education

FOREWORD

Since the passage of Title IX and Public Act 79-597 the federal and State laws providing for sex equity in education, Illinois' physical education personnel have worked diligently to implement quality coeducational physical education programs. As a result of their efforts, we have seen the emergence of many excellent coeducational physical education programs from which female and male students can benefit equally. In the integration of these programs, however, at least two aspects need to be further addressed: namely, ability grouping and performance evaluation. A lack of research related to the physiological and experiential differences that exist between male and female students at the secondary school age level has hampered physical educators in their efforts to develop objective, sex-fair standards of measurement for grouping and evaluating their students.

Through its Title IV Sex Desegregation Project, our Equal Educational Opportunity Section, whose mission is to provide technical assistance to local school districts in the implementation of sex equity laws, initiated an activity to address these concerns. In the summer of 1981, the Equal Educational Opportunity Section, in cooperation with the Program Planning and Development Section, conducted a Physical Education Ability Grouping and Performance Evaluation Symposium. The purpose of the Symposium was to identify parameters within which physical education teachers could work to develop their own objective, sex-fair standards of measurement for grouping and evaluating students.

This publication is the product of that Symposium. It represents the pool of knowledge and variety of experiences brought to the Symposium by thirty-five physical educators from junior and senior high schools, colleges and universities throughout Illinois. We extend our sincere appreciation to those individuals for their participation and, in particular, to the Findings Committee members, Dave Gehler, Barrington High School; Kathy Pearson, Western Illinois University; and Marianna Trekell, University of Illinois.

This publication does not purport to answer all questions on ability grouping or performance evaluation of students within coeducational physical education classes. It does, however, contain many suggestions for developing sex-fair standards of measurement which can be incorporated into a variety of institutional and instructional settings. We encourage you to consider these findings as you develop your programs and to continue your efforts to provide quality physical education programs for all your students.

Donald G. Gill
State Superintendent of Education

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PROLOGUE

The Equal Educational Opportunity Section's Sex Desegregation Project is funded under Title IV of the Civil Rights Act to provide technical assistance to local school districts in the implementation of Title IX and Public Act 79-597, the federal and state laws prohibiting sex discrimination in educational programs and activities. One of the requirements of both Title IX and PA 79-597 is that all classes, including physical education, must be open to students of both sexes. Since prior to the passage of these laws physical education classes generally were sex-segregated and because of the physiological and experiential differences that exist between male and female students at the secondary school age level, physical education is the curricular area which has generated the most requests for assistance from the Project.

In responding to those requests, it became apparent to Project staff that to achieve successful implementation of coeducational physical education classes two aspects of integrating those classes required special attention: namely, ability grouping and performance evaluation. Both Title IX and PA 79-597 allow grouping students by ability for instructional purposes, practice and competition, but require that those groups be determined by objective standards of measurement developed and applied without regard to sex. Both laws also require that if a single standard is used for evaluating student performance in physical education classes and that standard has an adverse effect on members of one sex, then appropriate standards which do not have such an effect must be used. The laws, however, do not identify what those objective standards for ability grouping are, nor do they stipulate when teachers should use single or separate standards for evaluating student performance.

To provide school district personnel with some clarification on these two issues, the Sex Desegregation Project intended to issue a Request for Proposals for the development of recommendations on how teachers can fairly and objectively group and evaluate students in coeducational physical education classes. During the preparation of the Request for Proposals, however, it became apparent that little research had been conducted on either ability grouping or performance evaluation in coeducational classes. Contracting with an individual or organization to produce those recommendations, therefore, did not appear to be the best avenue to pursue since a broad research base upon which those recommendations could be formulated was not available.

Consequently, rather than issuing the Requests for Proposals for the development of the recommendations, the Project generated further research and discussion on these topics by soliciting papers on sex-fair ability grouping and performance evaluation, inviting formal reactions to those papers from practitioners and experts in the field, and conducting a symposium at which the papers and reactions were presented and discussed. A Findings Committee was convened to attend the Symposium; synthesize the papers,

reactions, and discussion; and develop the recommendations.

The topics for the papers were identified and individuals with expertise in those areas were selected to write the papers. Since motor ability, physical fitness and skill/activity were the three types of tests identified as most generally used for ability grouping, one paper was written on the advantages and disadvantages of the use of each type of test to achieve sex-fair ability groups. A fourth paper addressed the practical/management concerns of the use of all three types of tests for ability grouping. Four papers were also written on sex-fair performance evaluation in coeducational physical education classes; two described practical/management approaches, and two outlined conceptual/research-based methods.

The papers were read and reacted to by twenty-two physical education specialists (Reactors) from throughout Illinois. To insure that the recommendations emanating from the Symposium would be applicable to a variety of teaching situations as well as theoretically sound, the Reactors, who were selected from local school districts, colleges, and universities, represented schools of various sizes, junior as well as senior high schools, and rural and urban settings. Prior to the Symposium, each Reactor read four of the eight papers and submitted a written reaction for each paper read. The reactions included a discussion of the applicability of the use of the particular ability grouping test/performance evaluation method in various activity units, the practical aspects of using such test/method, and its fairness to both sexes. A Moderator for the Symposium was chosen, three individuals were selected to serve on the Findings Committee, and a nationally recognized researcher in the area of tests and measurements agreed to serve as a consultant at the Symposium.

The Writers, Reactors and Findings Committee then convened for the two-day Symposium in August, 1981. The first day was devoted to discussing ability grouping; the second to performance evaluation. The Moderator led both days' discussions following the same structure on each day; a paper was presented by the writer, responded to by three Reactors, then discussed by the group. In addition, the first day included brief presentations on the importance of sex-fair grouping and evaluation and an administrator's perspective on the concerns of ability grouping and performance evaluation. Although no conclusions were drawn after the discussion of each paper, summary observations were offered by the Symposium Consultant at the conclusion of the second day.

The Findings Committee then synthesized the eight papers, eighty-eight written reactions and two days' discussion. The main body of this document represents their work.

REPORT OF THE FINDINGS COMMITTEE

Dave Gehler
Kathleen Pearson
Marianna Trekell

The implementation of Title IX and PA 79-597 within physical education programs has been more controversial and difficult to attain than in many other programs. Physical educators have attempted to be creative, to attend workshops and inservice programs, and to take advantage of existing scientific research, all in an attempt to develop and apply a curriculum which is sex-fair. But due to physiological and experiential differences between males and females and a shortage of research related to those differences, some very unique and real problems have arisen as schools attempt to implement coeducational physical education in a nondiscriminatory fashion. Two aspects of coeducational physical education that have caused particular concern are the sex-fair ability grouping and sex-fair performance evaluation of students. That is, given those known differences between females and males, how can teachers ensure that when they ability group and evaluate their students, they do so fairly and objectively without adversely effecting males or females?

Recognizing the need of physical education teachers for assistance in these two areas, the Illinois State Board of Education's Sex Desegregation Project conducted a Physical Education Symposium. The following is the report of the Symposium's Findings Committee. Included is a discussion of the general components of the problem, the implications of those components for sex-fair ability grouping and sex-fair evaluation, and culminating tips and techniques which physical educators should find helpful as they work with students in coeducational physical education classes.

THE PROBLEM

Boys and girls have differences of which the teacher should be aware in relationship to ability grouping and evaluation. Physiologically, boys *generally* have more strength, height, weight, a smaller percentage of body fat and greater cardiovascular endurance. Girls, on the other hand, *tend* to have greater flexibility, rhythmic ability and buoyancy.[6]

In addition to physiological differences, there are some apparent culturally induced differences between boys and girls. For example, there is evidence which suggests that boys *tend* to be more product-oriented, while girls tend to be more process-oriented.[2]

Physical educators need to develop procedures for evaluation and ability grouping which take into account these differences in such a way that the

process is not biased in favor of one sex or the other. The procedures need not be sophisticated or complex. Sound teacher judgment is frequently one means for achieving sex-fair practices. For example, the teacher is the best judge of whether a student has been classified in a group that is inappropriate for his or her skill level. Procedures must be such that boys and girls are provided with equal instructional and learning opportunities. In addition, traditional sex-role stereotyping must be avoided when grouping and evaluating students.

Three statements from the Title IX Regulation (*Federal Register*, Vol. 40, No. 108, June 4, 1975) outline the legal parameters surrounding the problem of sex-fair ability grouping and evaluation in coeducational physical education classes.

Section 86.34

(b) This section does not prohibit grouping of students in physical education classes and activities by ability as assessed by objective standards of individual performance developed and applied without regard to sex. (p. 24141)

(c) This section does not prohibit separation of students by sex within physical education classes or activities during participation in wrestling, boxing, rugby, ice hockey, football, basketball, and other sports the purpose or major activity of which involves bodily contact. (p. 24141) *

(d) Where the use of a single standard of measuring skill or progress in a physical education class has an adverse effect on members of one sex, the recipient shall use appropriate standards which do not have such effect. (p. 24141)

It is thus clear that:

- Sex-balanced classes or groupings (e.g. equal numbers of boys and girls) *are not* mandated by the Regulation.
- The assignment of equal numbers of boys and girls to a class or group *does not* necessarily result in a sex-fair setting.
- Ability grouping is *neither required nor prohibited* by the Regulation.
- Ability grouping is permissible provided that membership in a group is determined *objectively* with regard to *individual* performance, rather than on the basis of sex.

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* For any other sport to be considered a contact sport, an opinion must be obtained from the Director of the Office for Civil Rights (the enforcement agency for Title IX).

- Single-sex groupings are permitted *if* they occur as a result of *objective* standards.

- Students may be separated by sex for *participation* in *contact* sport skill practice or competition, but *not* during *instructional* portions of the class.

- The use of a single standard for grouping and/or evaluating students is permitted, but not mandated. *If*, however, a single standard appears to be sex-biased, separate standards for girls and boys should be used.

Faced with the documented differences between boys and girls and given the regulations mentioned above, the complexity of the problem becomes evident. Before suggestions for sex-fair procedures can be developed, we must consider the implications of documented sex differences and stated regulations for sex-fair ability grouping and performance evaluation in physical education.

IMPLICATIONS: ABILITY GROUPING

For the purpose of the Symposium, three types of tests were identified which appeared to be in general use to ability group students in physical education classes or to assign students to classes on the basis of ability: (1) motor ability tests, (2) physical fitness tests, and (3) skill tests.[5; 6; 7]

Research has shown that motor ability tests have limited value in the classification of junior and senior high school students and, therefore, are not recommended for delineating sex-fair ability groups. The most compelling argument against their use is that the ability to execute skillful movement is task-specific. Evidence to support this argument appeared in studies which revealed that general motor ability scores do not correlate highly with various specific sport skills.[7]

Skill tests and fitness tests share several common denominators when they are used as a means for grouping students. As an example, the Health Related Physical Fitness Test (AAPHERD: 1980) is designed to assess four components of fitness — strength, flexibility, lean body composition, and cardiovascular/muscular endurance.[6] Skill tests may require, in varying degrees, strength, speed, endurance, rhythm and/or flexibility.[5] With the exception of flexibility and rhythm, boys *in general* score higher in all of the above. Except within the movement activities of dance, gymnastics and related rhythmics, very few skill tests stress flexibility and rhythm in which girls might be expected to excel.

Based on these known differences between the sexes, if a single standard on fitness tests and most skill tests is used for grouping students, the following types of groups will most likely result. Group I, consisting of those who scored

highest will be comprised of many boys with very few girls. Group II consisting of those who scored in the middle range, will be comprised of the high scoring girls and the average-to-poor scoring boys. Group III, consisting of those who scored low, will be comprised of average-to-poor scoring girls and very poor scoring boys. (The reader should note that identification of high to low scoring girls or boys refers to their performance compared with other students of the same sex.)

Because of their comparatively low fitness and/or skill levels, boys in Group II may be low in motivation compared with girls in the same group. Grouping the average scoring girls in Group III with very poor scoring boys may place these girls in a low-motivated group. It is questionable if this type of grouping will afford equal educational opportunities, particularly if the groups remain relatively fixed over long periods of time. The motivational factor, however, may be insignificant in those self-testing units such as body conditioning, gymnastics and circuit training in which individual improvement is emphasized.

Using separate standards for boys and girls promises a solution to the above problem; however, this solution introduces another problem. Continued and exclusive use of separate standards for ability grouping boys and girls may tend to perpetuate a sex-role stereotype. If fitness and skill differences between boys and girls are culturally derived rather than biologically given, continued and exclusive use of different standards may serve to reinforce this cultural manifestation, and thus, perpetuate the sex-role stereotype. This, clearly, would not be in keeping with the intent of the law.

TIPS AND TECHNIQUES: ABILITY GROUPING

The following suggestions, which grew out of the Symposium are offered to aid physical educators in developing their own procedures for sex-fair ability grouping of students in coeducational physical education classes. The suggestions are designed to accommodate varying philosophies, scheduling practices and organizational patterns.

What Type of Test(s) to Use

Ability grouping should be based on scores from tests or test items which are appropriate to the objective(s) of the unit or lesson.

- If the objectives involve certain sport skills, scores from tests specific to that sport can be used to determine group membership.
- If the objectives involve certain fitness levels, fitness test scores can be used to determine group membership. For example, a fitness test can be appropriate for ability grouping in a body conditioning class.

- Motor ability test scores should not be used to ability group students. There is no evidence that a phenonmenon such as motor ability is measurable or that the phenomenon even exists.

- Students should be randomly assigned to groups without regard to sex when the purpose is to help students learn to appreciate and accept a variety of fitness or skill levels in others.

When to Use Single or Separate Standards

Teachers should avoid continued and exclusive use of either a single standard or separate standards for boys and girls when using fitness or skill tests for ability grouping students. The objective of a lesson or unit should determine whether a single standard or separate standard is most appropriate.

- When the objective is to give all students a chance to compete with others of like ability, raw scores on a specific sport skill test (single standard) can be used for ability grouping.

- When the objective is to motivate students to higher individual fitness and/or skill levels, scores from appropriate tests and separate standards can be used.

- When traditional mass instruction is used (members of a given ability group are all expected to do the same thing at the same time), a single standard for boys and girls should be used to ability group. All students in each ability group can then be capable of executing the demands made of them, and the teacher can plan the mass instruction with full knowledge of the skill level and physiological capability of the group.

- When individualized instructional methods are used (task completion stations, circuit training stations, mastery levels, problem solving, etc.), single standard, separate standards and random assignment are all appropriate for ability grouping.

General Suggestions

- Procedures used for grouping should be sufficiently flexible to accommodate a variety of teaching objectives within a class or unit.

- Students who have been misclassified, in the opinion of the teacher, should be moved to the appropriate group as soon as the misclassification is noticed.

IMPLICATIONS: PERFORMANCE EVALUATION

In addition to the problem of sex-fair ability grouping, the physical education teacher must also deal with the complexities of sex-fair evaluation. The same physiological and experiential differences between boys and girls which complicate the problem of ability grouping, also serve to make the problem of sex-fair evaluation difficult. The complexity of sex-fair evaluation is further confused by research documentation which suggests that boys are more product-oriented while girls are more process-oriented.

In order to be sex-fair, teachers should avoid methods which result in members of one sex consistently receiving higher evaluations and/or grades than those of the other sex. When members of one sex are consistently evaluated higher than members of the other sex, the standards used for evaluation may be sex-biased. Clearly, the problem of when to use a single standard, when to use separate standards and when to modify the test instrument for evaluating boys and girls is central to the problem of sex-fair evaluation in physical education.

TIPS AND TECHNIQUES: PERFORMANCE EVALUATION

General Suggestions

- All evaluations should be based on clearly stated objectives.
- Criterion-referenced standards with individual student contracts are recommended as a sex-fair means of evaluation.
- In order to avoid an adverse effect on members of one sex, if criterion-referenced standards with individual student contracts are not used, care should be taken to use appropriate standards during the evaluation process.

When to Use Separate Standards

- Separate standards for boys and girls should be used when activity success *is* based on *strength, endurance, height, weight and/or lean body composition*. Until evidence to the contrary is produced, standards for boys should be set higher than those for girls.
- Separate standards for boys and girls should be used when activity success *is* based on *flexibility, buoyancy and/or rhythm*. Until evidence to the contrary is produced, standards for girls should be set higher than those for boys.

- Separate standards for boys and girls should be used when performer *strength/power* is a factor in the propulsion. Tests such as passing, kicking, throwing for distance, and volleying against the wall with time constraints are examples of this type of skill.

When to Use Single Standards

- A single standard for girls and boys should be used when evaluation is based on *accuracy tests* in which performer strength or power is *not* a factor in the propulsion. The short serve in badminton and putting in golf are examples of this type of skill.

- A single standard for boys and girls should be used when evaluation is based on wall volley tests in which performer strength/power is *not* a factor in the propulsion. Volleying the ball against the wall consecutively a given number of times (with no time limit) is an example of this type of skill.

- A single standard for boys and girls should be used when evaluation is based on assessment of form and/or game strategy.

Product vs. Process

The evaluation plan should include provisions for the assessment of process as well as product achievement.

- If problem solving (process) is included as part of the evaluation, the assessment should be based on the degree of logic and consistency employed by the student as he/she presents a solution and the rationale upon which the solution is based. Value judgments on the part of the teacher should be avoided.

- When evaluation is based on the number of games won (product), competitors should be matched so that members of one sex do not predominate in either the win or lose category.

Grading on Improvement

When grading on improvement, teachers should use a method which recognizes that students who begin at the lower end have a greater potential for improvement than those who begin at a higher point. Also, this procedure requires both a pre- and a post-test. Two alternative methods appear below:

Alternative #1 — Develop norms for various levels of initial pre-test scores.*

Alternative #2 — Set a top score for the test being used. Compute improvement score by using the following formula.*

$$\frac{\text{Final Score} - \text{Initial Score}}{\text{Top Score} - \text{Initial Score}} = \text{Improvement Score}$$

Thus, the student's improvement score consists of the percent of potential improvement that is actually accomplished. In the following example, the top score equals 60, the final score equals 40, and the initial score equals 20. The improvement score would then be 50%.

Example:

$$\frac{40-20}{60-20} = \frac{20}{40} = .50$$

* Suggestions concerning the appropriate use of separate and single standards for boys and girls apply here.

OVERRIDING CONSIDERATIONS

Each performance test should be analyzed to attempt to determine if the components of the test might be sex-biased.

If the teacher is uncertain whether a skill/fitness test is sex-biased, scores made by boys should be compared with scores made by girls. If a disproportionate number of one sex prevails in the high or low scoring groups, separate standards should be used when that test is used in the evaluation process.

The number of competencies expected and the standards of acceptable performance should be such that all students (male and female) have a reasonable chance for success.

Safety factors should always take precedence when ability grouping students in coeducational physical education classes, just as they have in grouping students in single-sex classes.

No differences were cited at the Symposium related to differences between junior, as opposed to senior high students. However, teachers at the junior high level should be continually alert to physiolgical changes which may result in differences between boys and girls concerning their levels of performance.

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3. Fuller, Janet. "Practical Management Concerns Regarding the Use of Health-Related, Motor, and Skill Tests to Achieve Sex-Fair Ability Groupings."
   A paper presented at the Physical Education Ability Grouping and Performance Evaluation Symposium. Ottawa, Illinois, August 13-14, 1981.

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   A paper presented at the Physical Education Ability Grouping and Performance Evaluation Symposium. Ottawa, Illinois, August 13-14, 1981.

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   A paper presented at the Physical Education Ability Grouping and Performance Evaluation Symposium. Ottawa, Illinois, August 13-14, 1981.

ABSTRACTS OF SYMPOSIUM PAPERS

The following are abstracts of the eight papers which were written for and presented at the Physical Education Ability Grouping and Performance Evaluation Symposium held August 13-14, 1981, at Ottawa, Illinois. The abstracts appear in the order in which the papers were presented at the Symposium. Single copies of these papers are available upon request from the Illinois State Board of Education, Equal Educational Opportunity Section, 100 North First Street, E-230, Springfield, Illinois 62777, 217/782-1877.

Title: *The Use of Health-Related Physical Fitness Tests to Achieve Sex-Fair Ability Grouping of Students in Junior and Senior High School Physical Education Classes*

Writer: *Sharon Plowman*
Northern Illinois University

Abstract

The use of health-related physical fitness tests to achieve sex-fair ability grouping in junior and senior high school physical education classes first requires an understanding of what health-related physical fitness is. This is defined as a multifaceted construct related to functional health. In particular, it is concerned with tests of cardiovascular function (one-mile run), body composition (triceps and subscapular skinfolds), and musculoskeletal function of the abdominal and low back region (timed sit-ups and sit and reach).

The utilization of these tests for sex-fair ability grouping in physical education classes then requires the verification of two assumptions: 1) that there is a direct positive relationship between health-related physical fitness and the development and/or improvement of a variety of sport skills; and 2) that males and females are physiologically capable of equal performances on the health-related physical fitness test items. Evidence is presented to substantiate the first assumption, but not the second. A comparison is made of selected percentile norms from the AAHPERD Health-Related Physical Fitness Test Manual which shows that, with the exception of the flexibility item, if percentile scores are used for classification, true homogeneous groups based on absolute fitness will not be achieved — the boys will be better. The use of absolute scores to achieve sex-fair groups would require the establishment of criterion-referenced norms for the individual groups and probably result in an unequal sex, but equal fitness, distribution of students.

Title: *Use of Skill/Activity Tests to Achieve Sex-Fair Ability Grouping in Physical Education for Junior and Senior High School*

Writer: *Marian E. Kneer*
University of Illinois at Chicago Circle

Abstract

Sex-fair instruction in physical education is difficult to achieve because of professional ambivalence, situational problems, and student biological differences. Ability grouping as a means to facilitate a wide range of skill differences is professionally endorsed, but not widely used or accepted.

The purpose of this paper is to address the process of measurement to classify students by ability to accommodate the wide range of skill ability within any one of many sport and physical activities offered in physical education to achieve sex-fair groupings. The application of skill tests is one way to identify ability differences.

Testing skill is possible by using a variety of means to measure skill by employing one or more sport-specific objective measures such as norm- or criterion-referenced tests or subjective measures such as teacher ratings or student self-rating. Skill tests should be valid, reliable and objective. Prior to the 1970's, many skill tests were constructed and published to meet these standards. Most of the tests were norm-referenced. Norm-referenced tests embody standards which are set relatively for the purpose of discriminating among individuals. Criterion-referenced tests became of great interest to physical educators since 1970 as a response to the instructional objectives movement and a general dissatisfaction with norm-referenced standards. Criterion-referenced tests set an absolute standard for a specific domain of tasks.

Given the goals of sex-integrated physical education to provide equal educational opportunity and to lessen sex-role stereotyping, applying criterion-referenced skill tests for the purpose of assigning students to similar skill groups or mastery levels is proposed. The instructional approach will need to be adjusted to accommodate ability differences. If students are assigned to a class composed of students of similar ability, then the traditional group teaching behavior may be successful. Placing students in skill-integrated classes will require a differentiated approach using either small similar ability groups or individualized instruction.

Differentiated approaches are generally accepted as the best means to provide sex-fair instruction. Unfortunately, physical educators are not well prepared to use that approach; the school situation does not provide the needed time to prepare the necessary materials; and teachers are generally pessimistic about the success of proposed practices to achieve sex-integrated physical education.

Title: *The Use of Motor Ability Tests to Achieve Sex-Fair Ability Groupings*

Writers: *Margaret J. Safrit and Terence M. Wood*
University of Wisconsin-Madison

Abstract

The use of motor ability tests to achieve sex-fair ability groups should be considered from three standpoints — task specificity, sex differences, and individual differences in learning. While motor ability has been defined in many ways, this construct is frequently described as an individual's present ability to perform motor skills. Although a number of motor ability tests have been constructed for junior and senior high school students, separate tests were developed for male and female students.

The appropriateness of the experimental design, statistics, and methodology employed in the construction of many of these tests is questionable. However, even if tests were designed for use by both sexes, several factors mitigate against the use of ability tests for classification purposes. One is the theory that abilities are task-specific, rather than general in nature. There is extensive documentation supporting this point of view in the literature. A second factor is the basic gender differences that currently exist on certain dimensions of motor performance, primarily strength and endurance. These differences would probably lead to differences in motor ability test scores and, thus, to ability grouping by sex. Finally, differences in rate and amount of student learning reduce the value of classifying students into discrete groups according to natural ability. Thus, motor ability tests have limited value in the classification of junior and senior high school students in general and are not suitable for delineating sex-fair ability groups.

Title: *Practical Management Concerns Regarding the Use of Health-Related, Motor and Skill Tests to Achieve Sex-Fair Ability Groupings*

Writer: *Janet Fuller*
Glenbrook South High School

Abstract

Since the passage of Title IX of the Education Amendments of 1972, junior and senior high schools have had difficulty implementing the law in coeducational physical education programs that demonstrate sex-fairness in student learning. The Title IX Regulation provides for sex-fair ability grouping, but few schools utilize such methods. The purpose of this study is to analyze, from a practical management point of view in junior and senior high school physical education programs, three methods of ability grouping; namely, health-related fitness, skill/activity testing, and motor ability testing.

The writer approaches the problem with the following position. While Title IX was created in spirit to give girls and women more opportunity in education programs, special efforts should be made in ability grouping in physical education to assist girls in improving their skills and performance. For this to occur, ability grouping may not always be equal or sex-fair.

In discussing the advantages and disadvantages of ability tests for sex-fairness, the following were noted. Health-related physical fitness tests are not conducive to ability grouping of students in the program of activities. The tests were designed to measure an individual's health fitness and provide individual improvement. Criteria for sex-fair ability grouping could be used in fitness related activities in the curriculum. Skill/activity testing for sex-fair ability grouping would be effective in some activities, but not in others, for example, effective in swimming and gymnastics, but not in softball or football. Motor ability testing appears to be the best method for general placement of students in sex-fair ability groups in most activities in the program.

Skill/activity and motor ability test results are suitable for sex-fair ability grouping in team and individual/dual sports. Health-related fitness test results are appropriate for conditioning-type activities. Few results of any of the three tests are applicable to sex-fair ability grouping in rhythms/dance and recreational activities.

In a large traditional high school physical education program, several practical management methods of providing sex-fair ability groupings in the program are possible. A small traditional high school would need to offer fewer program activities, but sex-fair ability grouping is possible. A flexible modular scheduled high school offers many alternatives for sex-fair ability grouping since the program is designed to meet the needs and interests of students.

In conclusion, the writer recommends a variety of methods be used for sex-fair ability grouping in the physical education program. She urges departments to reevaluate the goals and objectives of physical education and their programs, and to implement sex-equitable and fair instructional methods. Teaching appropriate attitudes and behaviors and utilizing individualized instruction are recommended.

Title: *A Conceptual Approach to Sex-Fair Performance Evaluation*

Writer: *Barbara J. DeLong*
Southern Illinois University — Carbondale

Abstract

The current literature does not provide substantial evidence as to whether sex differences in performance are biological or psychosocial. There is clear indication that gender differences do exist in the normative data for physical fitness and many sport skill tests. The current literature suggests that criterion-referenced measurement provides the most unbiased approach to sex-fair evaluation.

To insure sex-fair evaluation of student performance, each teacher must have a commitment to extensive preplanning. This should include: (1) establishment of instructional and performance objectives for each activity in the program, (2) development of performance standards which take into account ability levels and documented biological differences between the sexes, and (3) a well-defined formative and summative system of evaluation which is criterion-referenced.

The program objectives should be related to physical fitness, skill movements and integration of skills. Depending on the age level and whether the program is required or elective, weightings for the categories would vary. In any case, the student should be given sufficient time to develop a minimal degree of competency on an individual basis. This can be accomplished through the use of daily or weekly task cards which state the criterion of acceptable performance so that the student has immediate and meaningful feedback.

The use of a contract would expedite recording skills completed and let the student assume some responsibility for determining feasible goals. The contract could be developed on a pass/no credit basis or the assignment of a numerical value of each task. For either situation, letter grades would be determined on a percentage of tasks completed which met the criterion. The use of task cards relates to formative evaluation, while the contract serves as the summative evaluation.

Title: *Practical/Management Approach to Sex-Fair Performance Evaluation*

Writers: *Ann Stevens and Ken McGonagle*
Evanston Township High School

Abstract

Since Title IX has been implemented, performance evaluation has become more difficult in many areas due to differences between the sexes in such factors as size, strength, and speed.

In this paper, a method of sex-fair performance evaluation is presented which can be utilized for most activities in any school situation. Six units were selected as being representative of the different types of sports activities: archery, badminton, gymnastics, softball, swimming and volleyball.

All students are evaluated on the same criteria on skills that are important in the performance of that activity. Each skill is scored on a 0-3 range. The total score is incorporated into the grading system for the unit grade. The Evanston Township High School grading system was used as an example for the activities. In addition, the evaluative procedure was introduced into a variety of grading systems representing three suburban high schools.

Documentation of this approach comes primarily from a review of exemplary physical education programs of other high schools throughout the country and from the exchange of ideas among department chairpersons of physical education. At the present time, there is very little practical research in the area of performance evaluation.

We believe the method presented has the potential to work effectively, efficiently, and objectively for evaluating the performance of all secondary students in physical education.

Title: *Sex-Fair Performance Evaluation*

Writer: *Helga Deutsch*
University of Illinois — Champaign

Abstract

Up to age 10 or 12, few differences exist between the sexes. After puberty, due to differing hormonal changes, males generally are stronger and have a greater capacity for muscular and cardiovascular endurance. In addition, some sociologists feel that males are product- or achievement-oriented and females are more process-oriented. Though these differences exist between the sexes, the degree to which they are present may be a reflection of cultural factors. We still do not know the full impact of what will result when cultural expectations minimize rather than magnify differences.

Physical education classes have usually included students with varying abilities and potentials. A sound evaluation plan must be based on the course objectives which reflect the school's, department's and teacher's philosophy. Assessment may include objective and subjective measures. One evaluation plan includes the following four components: (1) written test(s) — to assess knowledge, strategies, process, etc.; (2) objective skill tests — to assess fundamental skill aspects, achievement; (3) subjective evaluation — to assess positioning, adaptability to new situations; and (4) improvement. These components are weighted according to the importance of the course objective which they are assessing.

Assessment and evaluation must be used judiciously and objectively to assist in the educational process. It should help each student develop to his or her fullest capacity. Therefore, sex-fair evaluation practices are but an extension of the sound practices already in use.

Title: *Deerfield High School Sex-Fair Performance Evaluation*

Writer: *Bob Jones*
Deerfield High School

Abstract

The physical education staff at Deerfield High School has developed a sex-fair performance evaluation system which they believe satisfies the demands of Title IX. The system is an ongoing process that meets the needs of the Deerfield community and was not intended to be a cure-all for other communities. The Deerfield staff philosophy of participation helped formulate the program. The program was begun in 1973 and continues to develop and change. There are four phases to the system.

1. Participation Points

   The point system is a method of allowing the student to control fifty percent of the grade through participation and attendance.

2. Assessment Testing

   This system is an ongoing evaluation procedure concerned with determining the contributions of various units of instruction. Our goal is to evaluate all Deerfield curriculum offerings in terms of their contributions to various forms of fitness.

3. Fitness Testing

   Deerfield is committed to the use of the AAHPER Physical Fitness Test and the Health-Related Fitness Test in the near future.

4. Skill Testing

   We are involved in skill testing as a means of assessing personal performance and maintaining a high level of student participation. Standard tests and individual teacher-developed tests are used.

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